

**Ajl, Diane**

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**From:** Ryan, Daniel  
**Sent:** Tuesday, February 04, 2014 9:20 AM  
**To:** Ajl, Diane  
**Subject:** Fw: Re WV

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**From:** schaffer, joan  
**Sent:** Tuesday, February 04, 2014 8:32:13 AM  
**To:** Garvin, Shawn; Ryan, Daniel; D'Andrea, Michael  
**Subject:** Re WV

I rec'd a call this morning from Carol Amend in RCRA; she rec'd a request from her counterpart at the state asking for "something in writing" regarding the regulatory status of the tanks as they pertain to RCRA. She was told this request is coming from on high in the state. Carol said something was prepared over the past few weeks that was submitted through her director to someone on the 16<sup>th</sup> floor re the assessment of the tanks but she never heard any more about it. She did not want to provide anything in writing to her state counterpart without checking first with the front office.

Please advise.

Thanks...joan

Joan T. Schafer, Acting Director  
U.S. Environmental Protection Agency  
Region 3 Office of Public Affairs  
1650 Arch Street  
Philadelphia, PA 19103  
215-814-5143 (ph)  
215-814-5102



# Material Safety Data Sheet

The Dow Chemical Company

**Product Name:** DOWANOL(TM) DiPPH Glycol Ether

**Issue Date:** 08/20/2012

**Print Date:** 14 Aug 2013

The Dow Chemical Company encourages and expects you to read and understand the entire (M)SDS, as there is important information throughout the document. We expect you to follow the precautions identified in this document unless your use conditions would necessitate other appropriate methods or actions.

## 1. Product and Company Identification

**Product Name**

DOWANOL(TM) DiPPH Glycol Ether

**COMPANY IDENTIFICATION**

The Dow Chemical Company  
2030 Willard H. Dow Center  
Midland, MI 48674  
United States

Customer Information Number:

800-258-2436

**EMERGENCY TELEPHONE NUMBER**

**24-Hour Emergency Contact:**

989-636-4400

**Local Emergency Contact:**

989-636-4400

## 2. Hazards Identification

**Emergency Overview**

**Color:** Colorless to yellow

**Physical State:** Liquid

**Odor:** Odorless to mild

**Hazards of product:**

WARNING! Causes eye irritation. May be harmful if absorbed through skin. May be harmful if swallowed. Isolate area.

**OSHA Hazard Communication Standard**

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**Potential Health Effects**

**Eye Contact:** May cause severe eye irritation. May cause slight corneal injury.

**Skin Contact:** Brief contact may cause slight skin irritation with local redness.

**Skin Absorption:** Prolonged skin contact is unlikely to result in absorption of harmful amounts.

®(TM)\*Trademark

**Inhalation:** At room temperature, vapors are minimal due to low volatility. Vapor from heated material or mist may be hazardous on single exposure. For respiratory irritation and narcotic effects: No relevant data found.

**Ingestion:** Low toxicity if swallowed. Small amounts swallowed incidentally as a result of normal handling operations are not likely to cause injury; however, swallowing larger amounts may cause injury.

**Aspiration hazard:** Based on physical properties, not likely to be an aspiration hazard.

**Birth Defects/Developmental Effects:** For the major component(s): Contains component(s) which caused birth defects in laboratory animals only at doses toxic to the mother.

### 3. Composition Information

Component	CAS #	Amount
Dipropylene glycol phenyl ether	51730-94-0	>= 60.0 %
Propylene glycol phenyl ether	770-35-4	<= 25.0 %
Polypropylene glycol phenyl ether	28212-40-0	<= 15.0 %

### 4. First-aid measures

#### Description of first aid measures

**General advice:** First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection). If potential for exposure exists refer to Section 8 for specific personal protective equipment.

**Inhalation:** Move person to fresh air; if effects occur, consult a physician.

**Skin Contact:** Wash skin with plenty of water.

**Eye Contact:** Immediately flush eyes with water; remove contact lenses, if present, after the first 5 minutes, then continue flushing eyes for at least 15 minutes. Obtain medical attention without delay, preferably from an ophthalmologist. Suitable emergency eye wash facility should be immediately available.

**Ingestion:** If swallowed, seek medical attention. Do not induce vomiting unless directed to do so by medical personnel.

#### Most important symptoms and effects, both acute and delayed

Aside from the information found under Description of first aid measures (above) and Indication of immediate medical attention and special treatment needed (below), no additional symptoms and effects are anticipated.

#### Indication of immediate medical attention and special treatment needed

Maintain adequate ventilation and oxygenation of the patient. No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

### 5. Fire Fighting Measures

#### Suitable extinguishing media

Water fog or fine spray. Dry chemical fire extinguishers. Carbon dioxide fire extinguishers. Foam. General purpose synthetic foams (including AFFF type) or protein foams are preferred if available. Alcohol resistant foams (ATC type) may function. Water fog, applied gently may be used as a blanket for fire extinguishment.

**Extinguishing Media to Avoid:** Do not use direct water stream. May spread fire.

#### Special hazards arising from the substance or mixture

**Hazardous Combustion Products:** During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Combustion products may include and are not limited to: Carbon monoxide. Carbon dioxide.

**Unusual Fire and Explosion Hazards:** Container may rupture from gas generation in a fire situation. Violent steam generation or eruption may occur upon application of direct water stream to hot liquids.

### Advice for firefighters

**Fire Fighting Procedures:** Keep people away. Isolate fire and deny unnecessary entry. Use water spray to cool fire exposed containers and fire affected zone until fire is out and danger of reignition has passed. Fight fire from protected location or safe distance. Consider the use of unmanned hose holders or monitor nozzles. Immediately withdraw all personnel from the area in case of rising sound from venting safety device or discoloration of the container. Do not use direct water stream. May spread fire. Move container from fire area if this is possible without hazard. Burning liquids may be moved by flushing with water to protect personnel and minimize property damage. Water fog, applied gently may be used as a blanket for fire extinguishment.

**Special Protective Equipment for Firefighters:** Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves). Avoid contact with this material during fire fighting operations. If contact is likely, change to full chemical resistant fire fighting clothing with self-contained breathing apparatus. If this is not available, wear full chemical resistant clothing with self-contained breathing apparatus and fight fire from a remote location. For protective equipment in post-fire or non-fire clean-up situations, refer to the relevant sections.

## 6. Accidental Release Measures

**Personal precautions, protective equipment and emergency procedures:** Evacuate area. Keep upwind of spill. Ventilate area of leak or spill. Only trained and properly protected personnel must be involved in clean-up operations. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection. Refer to Section 7, Handling, for additional precautionary measures.

**Environmental precautions:** Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information.

**Methods and materials for containment and cleaning up:** Small spills: Absorb with materials such as: Sand. Vermiculite. Collect in suitable and properly labeled containers. Large spills: Contain spilled material if possible. Pump into suitable and properly labeled containers. See Section 13, Disposal Considerations, for additional information.

## 7. Handling and Storage

### Handling

**General Handling:** Do not get in eyes, on skin, on clothing. Do not swallow. Avoid breathing vapor or mist. Keep container closed. Use with adequate ventilation. Wash thoroughly after handling. See Section 8, EXPOSURE CONTROLS AND PERSONAL PROTECTION.

**Other Precautions:** Spills of these organic materials on hot fibrous insulations may lead to lowering of the autoignition temperatures possibly resulting in spontaneous combustion.

### Storage

Store in the following material(s): Carbon steel. Stainless steel. Phenolic lined steel drums. Do not store in: Aluminum. Copper. Galvanized iron. Galvanized steel. See Section 10 for more specific information.

#### Storage Period:

##### Bulk

6 Months

Metal drums.  
24 Months

## 8. Exposure Controls / Personal Protection

### Exposure Limits

None established

### Personal Protection

**Eye/Face Protection:** Use chemical goggles.

**Skin Protection:** Use protective clothing chemically resistant to this material. Selection of specific items such as face shield, boots, apron, or full body suit will depend on the task.

**Hand protection:** Use gloves chemically resistant to this material. Examples of preferred glove barrier materials include: Butyl rubber. Ethyl vinyl alcohol laminate ("EVAL"). Examples of acceptable glove barrier materials include: Natural rubber ("latex"). Neoprene. Nitrile/butadiene rubber ("nitrile" or "NBR"). Polyvinyl chloride ("PVC" or "vinyl"). **NOTICE:** The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier.

**Respiratory Protection:** Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, wear respiratory protection when adverse effects, such as respiratory irritation or discomfort have been experienced, or where indicated by your risk assessment process. Use an approved air-purifying respirator when vapors are generated at increased temperatures or when dust or mist is present. The following should be effective types of air-purifying respirators: Organic vapor cartridge with a particulate pre-filter.

**Ingestion:** Use good personal hygiene. Do not consume or store food in the work area. Wash hands before smoking or eating.

### Engineering Controls

**Ventilation:** Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, general ventilation should be sufficient for most operations. Local exhaust ventilation may be necessary for some operations.

## 9. Physical and Chemical Properties

### Appearance

Physical State	Liquid.
Color	Colorless to yellow
Odor	Odorless to mild
Odor Threshold	No test data available
pH	Not available
Melting Point	Not applicable to liquids
Freezing Point	< -50 °C (< -58 °F) <i>Literature</i>
Boiling Point (760 mmHg)	280 °C (536 °F) <i>Calculated</i>
Flash Point - Closed Cup	138 °C (280 °F) <i>Pensky-Martens Closed Cup ASTM D 93</i>
Evaporation Rate (Butyl Acetate = 1)	<0.01 <i>Literature</i>
Flammability (solid, gas)	Not applicable to liquids
Flammable Limits In Air	<b>Lower:</b> Not available <b>Upper:</b> Not available
Vapor Pressure	0.002 mmHg @ 20 °C <i>Calculated</i> (based on major component)
Vapor Density (air = 1)	Not available

Specific Gravity (H2O = 1)	1.0513 25 °C/25 °C ASTM D4052
Solubility in water (by weight)	30 g/l 1.5 % @ 25 °C Measured
Partition coefficient, n-octanol/water (log Pow)	No data available for this product. See Section 12 for individual component data.
Autoignition Temperature	No test data available
Decomposition Temperature	No test data available
Dynamic Viscosity	36 cps @ 25 °C ASTM D445
Kinematic Viscosity	34.3 cSt @ 25 °C Calculated
Liquid Density	1.0482 g/cm3 @ 25 °C Digital density meter

## 10. Stability and Reactivity

### Reactivity

No dangerous reaction known under conditions of normal use.

### Chemical stability

Thermally stable at typical use temperatures.

### Possibility of hazardous reactions

Polymerization will not occur.

**Conditions to Avoid:** Do not distill to dryness. Product can oxidize at elevated temperatures. Generation of gas during decomposition can cause pressure in closed systems.

**Incompatible Materials:** Avoid contact with: Strong acids. Strong bases. Strong oxidizers.

### Hazardous decomposition products

Decomposition products depend upon temperature, air supply and the presence of other materials. Decomposition products can include and are not limited to: Aldehydes. Ketones. Organic acids.

## 11. Toxicological Information

### Acute Toxicity

#### Ingestion

As product: Single dose oral LD50 has not been determined.  
For the major component(s): LD50, rat > 2,000 mg/kg

#### Dermal

As product: The dermal LD50 has not been determined.  
For the major component(s): LD50, rat > 2,000 mg/kg

#### Inhalation

As product: The LC50 has not been determined.

### Eye damage/eye irritation

May cause severe eye irritation. May cause slight corneal injury.

### Skin corrosion/irritation

Brief contact may cause slight skin irritation with local redness.

### Sensitization

#### Skin

For the major component(s): Did not cause allergic skin reactions when tested in guinea pigs.

#### Respiratory

No specific, relevant data available for assessment.

### Repeated Dose Toxicity

Based on available data, repeated exposures are not anticipated to cause additional significant adverse effects.

**Chronic Toxicity and Carcinogenicity**

No specific, relevant data available for assessment.

**Developmental Toxicity**

For the major component(s): Contains component(s) which caused birth defects in laboratory animals only at doses toxic to the mother.

**Reproductive Toxicity**

For the major component(s): In animal studies, did not interfere with reproduction.

**Genetic Toxicology**

In vitro genetic toxicity studies were negative for component(s) tested. For the component(s) tested: Animal genetic toxicity studies were predominantly negative.

## 12. Ecological Information

**Toxicity****Data for Component: Dipropylene glycol phenyl ether**

Material is practically non-toxic to aquatic organisms on an acute basis  
(LC50/EC50/EL50/LL50 >100 mg/L in the most sensitive species tested).

**Fish Acute & Prolonged Toxicity**

LC50, Oncorhynchus mykiss (rainbow trout), static test, 96 h: 204 mg/l

**Aquatic Invertebrate Acute Toxicity**

EC50, Daphnia magna (Water flea), static test, 48 h, immobilization: 336 mg/l

**Aquatic Plant Toxicity**

ErC50, Pseudokirchneriella subcapitata (green algae), Growth rate inhibition, 96 h: 188 mg/l

**Data for Component: Propylene glycol phenyl ether**

Material is practically non-toxic to aquatic organisms on an acute basis  
(LC50/EC50/EL50/LL50 >100 mg/L in the most sensitive species tested).

**Fish Acute & Prolonged Toxicity**

LC50, Pimephales promelas (fathead minnow), static test, 96 h: 280 mg/l

**Aquatic Invertebrate Acute Toxicity**

LC50, Daphnia magna (Water flea), static test, 48 h, survival: 370 mg/l

**Aquatic Plant Toxicity**

EC50, Desmodismus subspicatus (green algae), static test, Growth rate inhibition, 72 h: > 100 mg/l

**Data for Component: Polypropylene glycol phenyl ether**

No data available.

**Persistence and Degradability****Data for Component: Dipropylene glycol phenyl ether**

Material is expected to be readily biodegradable.

**OECD Biodegradation Tests:**

Biodegradation	Exposure Time	Method	10 Day Window
100 %	28 d	OECD 301F Test	pass

**Data for Component: Propylene glycol phenyl ether**

Material is readily biodegradable. Passes OECD test(s) for ready biodegradability.

Biodegradation rate may increase in soil and/or water with acclimation.

**OECD Biodegradation Tests:**

Biodegradation	Exposure Time	Method	10 Day Window
72 %	28 d	OECD 301F Test	fail

**Indirect Photodegradation with OH Radicals**

Rate Constant	Atmospheric Half-life	Method
3.72E-11 cm <sup>3</sup> /s	3.5 h	Estimated.

Theoretical Oxygen Demand: 2.31 mg/mg

Data for Component: Polypropylene glycol phenyl ether

No data available.

**Bioaccumulative potential**Data for Component: Dipropylene glycol phenyl ether**Bioaccumulation:** Bioconcentration potential is low (BCF < 100 or Log Pow < 3).**Partition coefficient, n-octanol/water (log Pow):** 1.73 Estimated.**Bioconcentration Factor (BCF):** < 1; Estimated.Data for Component: Propylene glycol phenyl ether**Bioaccumulation:** Bioconcentration potential is low (BCF < 100 or Log Pow < 3).**Partition coefficient, n-octanol/water (log Pow):** 1.41 MeasuredData for Component: Polypropylene glycol phenyl ether**Bioaccumulation:** No data available.**Mobility in soil**Data for Component: Dipropylene glycol phenyl ether**Mobility in soil:** Given its very low Henry's constant, volatilization from natural bodies of water or moist soil is not expected to be an important fate process. Potential for mobility in soil is very high (Koc between 0 and 50).**Partition coefficient, soil organic carbon/water (Koc):** 12.36 Estimated.**Henry's Law Constant (H):** 4.77E-10 atm\*m3/moleData for Component: Propylene glycol phenyl ether**Mobility in soil:** Potential for mobility in soil is very high (Koc between 0 and 50).**Partition coefficient, soil organic carbon/water (Koc):** 19 - 21 Estimated.**Henry's Law Constant (H):** 4.41E-07 atm\*m3/mole; 25 °C Estimated.Data for Component: Polypropylene glycol phenyl ether**Mobility in soil:** No data available.**13. Disposal Considerations**

DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER. All disposal practices must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator. AS YOUR SUPPLIER, WE HAVE NO CONTROL OVER THE MANAGEMENT PRACTICES OR MANUFACTURING PROCESSES OF PARTIES HANDLING OR USING THIS MATERIAL. THE INFORMATION PRESENTED HERE PERTAINS ONLY TO THE PRODUCT AS SHIPPED IN ITS INTENDED CONDITION AS DESCRIBED IN MSDS SECTION: Composition Information. FOR UNUSED & UNCONTAMINATED PRODUCT, the preferred options include sending to a licensed, permitted: Incinerator or other thermal destruction device.

**14. Transport Information****DOT Non-Bulk**

NOT REGULATED

**DOT Bulk**

NOT REGULATED

**IMDG**

NOT REGULATED



**ICAO/IATA**  
NOT REGULATED

*This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.*

**15. Regulatory Information****OSHA Hazard Communication Standard**

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Sections 311 and 312**

Immediate (Acute) Health Hazard	Yes
Delayed (Chronic) Health Hazard	No
Fire Hazard	No
Reactive Hazard	No
Sudden Release of Pressure Hazard	No

**Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Section 313**

To the best of our knowledge, this product does not contain chemicals at levels which require reporting under this statute.

**Pennsylvania (Worker and Community Right-To-Know Act): Pennsylvania Hazardous Substances List and/or Pennsylvania Environmental Hazardous Substance List:**

To the best of our knowledge, this product does not contain chemicals at levels which require reporting under this statute.

**Pennsylvania (Worker and Community Right-To-Know Act): Pennsylvania Special Hazardous Substances List:**

To the best of our knowledge, this product does not contain chemicals at levels which require reporting under this statute.

**California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986)**

This product contains no listed substances known to the State of California to cause cancer, birth defects or other reproductive harm, at levels which would require a warning under the statute.

**US. Toxic Substances Control Act**

All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements under 40 CFR 720.30

**CEPA - Domestic Substances List (DSL)**

All substances contained in this product are listed on the Canadian Domestic Substances List (DSL) or are not required to be listed.

**16. Other Information****Hazard Rating System**

NFPA

Health

Fire

Reactivity

3

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**Revision**

Identification Number: 1062740 / 0000 / Issue Date 08/20/2012 / Version: 1.0

Most recent revision(s) are noted by the bold, double bars in left-hand margin throughout this document.

**Legend**

N/A	Not available
W/W	Weight/Weight
OEL	Occupational Exposure Limit
STEL	Short Term Exposure Limit
TWA	Time Weighted Average
ACGIH	American Conference of Governmental Industrial Hygienists, Inc.
DOW IHG	Dow Industrial Hygiene Guideline
WEEL	Workplace Environmental Exposure Level
HAZ DES	Hazard Designation
Action Level	A value set by OSHA that is lower than the PEL which will trigger the need for activities such as exposure monitoring and medical surveillance if exceeded.

The Dow Chemical Company urges each customer or recipient of this (M)SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this (M)SDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product. Due to the proliferation of sources for information such as manufacturer-specific (M)SDSs, we are not and cannot be responsible for (M)SDSs obtained from any source other than ourselves. If you have obtained an (M)SDS from another source or if you are not sure that the (M)SDS you have is current, please contact us for the most current version.

Coel 1/23/14

# Ex. 5 - Attorney-Client

# **Ex. 5 - Attorney-Client**

# **Ex. 5 - Attorney-Client**

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## West Virginia: second chemical leaked during spill prompts new probe

Freedom Industries failed to report second chemical leak during spill that tainted drinking water for 300,000 West Virginians

Associated Press in Charleston, West Virginia  
 theguardian.com, Wednesday 22 January 2014 14.32 EST

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Freedom Industries president Gary Southern leaves the company's bankruptcy hearing in Charleston, West Virginia Tuesday. Photograph: Craig Cunningham/AP

A second chemical was released during a spill that contaminated the water supply for 300,000 West Virginians, state officials said Wednesday, though the newly identified substance appears to be less toxic than the coal-cleaning agent already known to have leaked.

State regulators sharply criticized the company at the center of the 9 January spill for failing to report the presence of the second chemical and ordered them to disclose everything that leaked into the Elk River from their storage tank by 4 pm Wednesday.

"Having to order them to provide such obvious information is indicative of the continued decline of their credibility," said Randy Huffman, secretary of the state's department of environmental protection.

Freedom Industries didn't report until Tuesday that a mixture of polyglycol ethers, or PPH, also entered the water system when the spill occurred, the state agency said in a news release. Separately, the company didn't list PPH as part of its latest hazardous chemicals

inventory for the Charleston facility filed in February 2013.

State officials are working with the federal centers for disease control and prevention and other experts to test samples and ensure the water supply is safe, the bureau said. The PPH made up about 5% of the tank's volume, the CDC said.

Tests done right after officials lifted a ban on using tap water didn't detect PPH, said Amy Shuler Goodwin, a spokeswoman for Governor Earl Ray Tomblin.

Information on PPH's toxicity is limited, but it appears to be lower than that of the coal-cleaning chemical known as MCHM, the CDC said.

"Given the small percentage of PPH in the tank and information suggesting similar water solubility as MCHM, it is likely that any amount of PPH currently in the water system would be extremely low," the CDC's statement said.

On Tuesday, Freedom Industries reached a bankruptcy court deal for up to \$4m in credit from a lender to help continue operations, an attorney said.

The deal lets the company continue paying its 51 employees in the short term, a biweekly payroll of about \$172,000, said company attorney Mark Freeland. The company can also continue paying costs for environmental remediation and will have money for critical day-to-day administrative expenses, and can pay top vendors, according to the attorney.

Freedom Industries filed for Chapter 11 bankruptcy Friday, freezing dozens of lawsuits against the company. Many are by local businesses owners who say they lost money during a water-use ban that lasted

Ex. 5 - Deliberative



several days. State and federal investigations into the spill of a coal-cleaning chemical are continuing.

In bankruptcy court testimony, Freedom Industries president Gary Southern said the 12 days since the spill have been "completely chaotic".

Southern had said the company spent \$800,000 last week to remedy environmental damage from the spill.

Chief judge Ronald G Pearson, who called the case one of the most unusual he's seen, said Freedom Industries wouldn't obtain all the protections it sought, since the company so far has offered very little financial information.

Approached after the bankruptcy hearing with questions about the second chemical, Southern walked away from reporters and said he had another meeting to attend.



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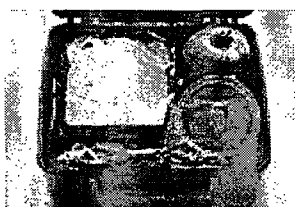
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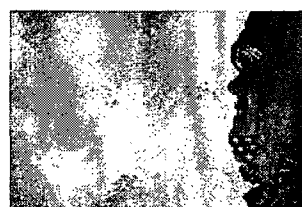
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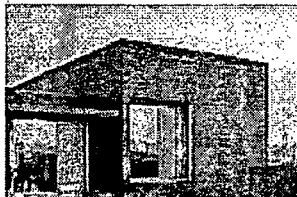
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3 PEOPLE, 3 COMMENTS

**thephilth**

22 January 2014 8:07pm

Regulators, mount up!

1

**CornsilkSW** thephilth

22 January 2014 11:19pm

What regulators ?

West Virginia did away with those state positions decades ago.

6

**Witness1** CornsilkSW

23 January 2014 12:03pm

No they didn't. They sold those positions to the Coal industry, that's why they get away with every disaster they cause.

0

2 PEOPLE, 2 COMMENTS

**OccupyEyed**

22 January 2014 9:20pm

One section of the Chris Hedges book, Days of Destruction Days of Revolt, is dedicated to the ecological hell that is West Virginia. This book came out several years ago, so it now appears prescient. One of the things that he made very clear in his book, is that the EPA--the Environmental Protection Agency--in that state is simply a storefront for industry. The health and wellbeing of that state's residents were sacrificed to industry in exchange for the usual payoffs to politicians and the fleeting reward of jobs for some of the state's citizens.

Now the jobs are almost gone, and those who sacrificed everything to have them are left with failing health for themselves, their neighbors, and their families. *Someone* made a lot of money--just not the commoners who did the work and are left to suffer the consequences of longstanding poisons in the water and earth. Sound familiar?

13

**TyroneBHorneigh** OccupyEyed

23 January 2014 11:18am

You are absolutely correct. Although I haven't read Mr. Hedges' book you describe, I'm familiar with some of his work. Also, it is likewise true that the

1

## Related information

### Environment

US Environmental Protection Agency (EPA)



**West Virginia water declared safe but smell – and fear – lingers**

18 Jan 2014

Residents wary despite official advice following contamination of state capital's water supply by chemical spill

17 Jan 2014

**Company behind West Virginia chemical spill files for bankruptcy**

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**West Virginia company behind water contamination cited at second facility**

13 Jan 2014

**West Virginia tap water ban partially lifted five days after chemical spill**



**West Virginia officials promise ban on chemically tainted water will soon lift**

13 Jan 2014

Five days after spill, water distribution remains a priority while investigation continues and hospitals treat exposure

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**MEDIAMATH WINS 19/20 HEAD TO HEAD TESTS**  
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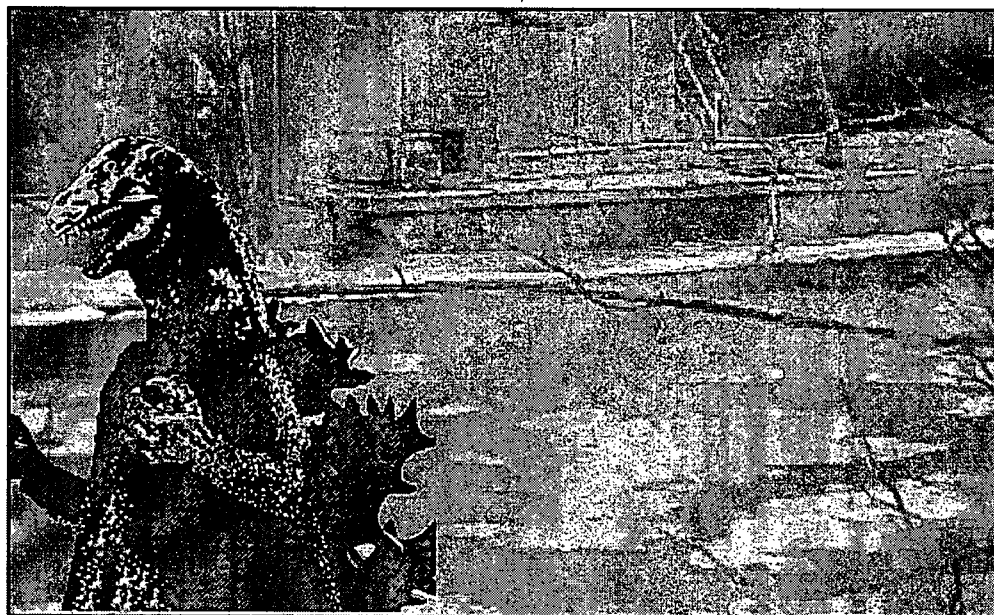
January 24, 2014

BETTER LYING THROUGH CHEMISTRY

11:25 am January 23, 2014

# Freedom Industries Would Love To Tell You About The Other Chemical They Spilled, But Sorry, 'Trade Secret'

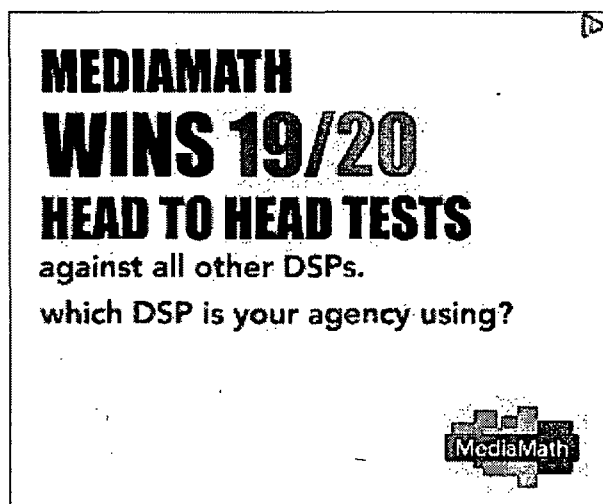
by [Doktor Zoom](#)



Two weeks after dumping enough toxic crap into the Elk River to make water unusable in much of West Virginia,

Freedom Industries told state environmental officials that in addition to the original toxic crap — “Crude MCHM” — that everyone knew about, there was a second chemical in the leaky tank as well. Oh, also, the company said, they can’t really say much about what exactly the mystery substance, “PPH,” is, or what it will do to people, because its exact identity is “proprietary.”

We are betting that it is probably *not* the mysterious “Chemical X” that was key to the creation of the Powerpuff Girls.



But don’t worry too much, because Centers for Disease Control spokesperson Barbara Reynolds said that, while available information on both chemicals’ potential health effects is “very limited,” PPH is “probably less toxic” than MCHM, as far as they can tell. Really, who knows? Proprietary, man.

And even better, said Reynolds in an email, if you’re in West Virginia and feeling lucky, it’s entirely possible the drinking water might be okay. Or not:

“Given the small percentage of PPH in the tank and information suggesting similar water solubility as MCHM, it is likely that any amount of PPH currently in the water system would be extremely low. However, the water system has not been tested for this material.”

Be sure to let the CDC know if the dog grows any extra appendages, OK?

On Tuesday morning, Freedom Industries’ president, the charming and forthcoming Gary Southern, told Mike Dorsey, emergency response chief for the state Department of Environmental Protection, about the PPH, and said that there was about 300 gallons of it mixed with the Crude MCHM. Or at least, he informed Dorsey that something identified as “PPH, stripped” was in there. Hey, let’s read up on some chemicals, shall we?

*PPH stripped*  
~~Dorsey said that Freedom told him that the “PPH, stripped” it was using was a mixture of two other chemicals, DiPPH Glycol Ether, and PPH Glycol Ether. Dow Chemical makes those two chemicals, according to the information Freedom gave to Dorsey.~~

But Richard Denison, a senior scientist with the Environmental Defense Fund, noted that Freedom Industries withheld the specific chemical identity of the “PPH, stripped.” The [Material Safety Data Sheet] provided by the company lists the key “chemical abstract service” identification number as “proprietary.”

So OK, we can tell you we spilled some stuff. But you really don't need to know the details. What are you, commies?

The federal Environmental Protection Agency does have the power to compel Freedom Industries to disclose the exact identity of the chemical, but has so far not done so. The state agency has ordered the company to release the information, but Freedom Industries replied only that the tank contained a mixture of Crude MCHM and PPH, so shut up:

“PPH is added to the Crude MCHM to act as an ‘extender’ in that the Crude MCHM is available in limited, sporadic quantities,” Freedom said in its response. “At the time of the release on Jan. 9, the blend in Tank No. 396, after extensive calculation, was approximately 88.5 percent Crude MCHM, and 7.3 percent PPH by weight and 4.2 percent water by weight. Our records and internal investigations indicate that there were no other materials in Tank 396 at the time of the release.”

Look, the details would be all chemically and boring, and we've told you people plenty already. Also, there's no truth to the rumors that we're breeding supersoldiers for the CIA.

\* Wonky chemical detail — the *Charleston Gazette* notes that “While some reports have used the term “Crude MCHM” and the chemical “4-methylcyclohexanemethanol” interchangeably, the 4-MCHM is actually only one of seven components of Crude MCHM. We have previously used that big honkin' name, but apparently that was incorrect. Wonkette regrets the molecular error.

[WVGazette.com]

*Follow Doktor Zoom on Twitter. When will he send out tweets? That is proprietary information.*

## Tagged

- [chemical spill](#),
- [crude mchm](#),
- [elk river](#),
- [epa](#),
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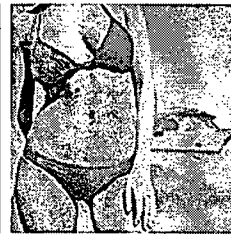
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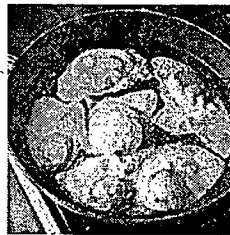
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Coe

PPH, stripped

Preparation date: October 15, 2013  
Page 1 of 7

## SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

SDS REVISION #: 001

PRODUCT IDENTIFIER: PPH, stripped

OTHER IDENTIFIERS: None

CHEMICAL FORMULA: Complex mixture 5.6% in MCHM

RELEVANT USES: Mineral flotation

DISTRIBUTED BY: Freedom Industries, Inc.  
1015 Barlow Drive  
Charleston, WV 25311

PHONE NUMBERS: Business - (304) 720-8065 (business hours)  
CHEMTREC - (800) 424-9300 (transportation emergencies)

## SECTION 2 - HAZARDS IDENTIFICATION

GHS CLASSIFICATION:  
Serious eye irritation (Category 2)  
Skin irritation (Category 2)



SIGNAL WORD:  
Warning!

HAZARD STATEMENTS:  
Causes skin irritation and serious eye irritation.

### PRECAUTIONARY STATEMENTS:

#### Prevention

Wear protective gloves, eye protection and face protection. Wash exposed areas thoroughly after handling.

#### Response

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. If on skin: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.

Section 2 continued on next page

**SECTION 2 - HAZARDS IDENTIFICATION (continued)****PRECAUTIONARY STATEMENTS (continued):****Storage**

Not applicable

**Disposal**

Not applicable

HAZARDS NOT OTHERWISE CLASSIFIED: None

**SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS**

<u>Component</u>	<u>%</u>	<u>CAS No.</u>
Polyglycol ethers	100	Proprietary*

\*The specific chemical identity is being withheld as "trade secret" in accordance with 29 CFR 1910.1200(i)

**SECTION 4 - FIRST AID MEASURES****IN CASE OF EYE CONTACT:**

Immediately flush with large amounts of water for at least 15 minutes, lifting upper and lower lids occasionally. Remove contact lenses, if present and easy to do. Get immediate medical attention. Do not use chemical antidote.

**IN CASE OF SKIN CONTACT:**

Wash exposed area with soap and water. Remove contaminated clothing and launder before reuse.

**IF SWALLOWED:**

If conscious, immediately give two large glasses of water. Call a physician. Never give anything by mouth to an unconscious person.

**IF INHALED:**

If affected, move to fresh air. If breathing is difficult, contact a physician.

**MOST IMPORTANT SYMPTOMS AND EFFECTS:**

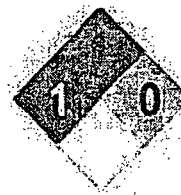
Contact with skin or eyes causes irritation, which may be severe, especially in sensitive individuals.

**NOTE TO PHYSICIAN:**

Treat symptomatically.

**SECTION 5 - FIRE FIGHTING MEASURES****FLAMMABLE PROPERTIES:**

This material is not easily ignited, but will burn if heated sufficiently. It meets the OSHA definition of a Class IIIB – combustible liquid.

**EXTINGUISHING MEDIA:**

Use water fog, alcohol-resistant foam or dry chemical or carbon dioxide.

**PROTECTION OF FIREFIGHTERS:**

Keep personnel removed from and upwind. Wear full protective clothing and self-contained breathing apparatus with full face-piece. Cool containers with water. Water or foam may cause frothing which can be violent, especially if sprayed into containers of hot, burning liquid.

**SECTION 6 - ACCIDENTAL RELEASE MEASURES****PRECAUTIONS, PROTECTIVE EQUIPMENT & EMERGENCY PROCEDURES:**

Persons not wearing protective equipment should be excluded from the area of the spill until cleanup has been completed.

**CONTAINMENT & CLEAN-UP:**

Dike area of spill to prevent spreading and pump liquid to salvage tank. Absorb remaining liquid on vermiculite, floor absorbent or other absorbent material and shovel into containers.

**SECTION 7 - HANDLING AND STORAGE****HANDLING:**

Avoid contact with skin, eyes and clothing. Avoid inhalation of vapors. Wash thoroughly after handling.

**STORAGE:**

Keep in closed or covered containers when not in use. Store in cool dry place with adequate ventilation. Do not store near strong oxidizing materials.

**SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION****EXPOSURE GUIDELINES:**

Not established for product or components

Section 8 continued on next page

**SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION (continued)****ENGINEERING CONTROLS:**

Provide sufficient ventilation to maintain exposure below level of overexposure.

**EYE / FACE PROTECTION:**

Chemical splash goggles, in compliance with OSHA regulations, are advised.

**SKIN PROTECTION:**

Wear protective gloves such as Neoprene or Buna-N.

**RESPIRATORY PROTECTION:**

Not required under normal conditions of use; however, a NIOSH/MSHA supplied air respirator or canister-type respirator equipped with organic vapor cartridge is recommended if there is insufficient ventilation to maintain exposures below established exposure limits.

**SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

**Appearance:** Clear, colorless or yellow liquid @  
68° F (20° C)

**Odor:** Mild

**pH:** Unavailable

**Freezing Point:** <32° F (0° C)

**Initial Boiling Point:** ~477° F (247° C)

**Flash Point:** >253° F (123° C) PMCC

**Evaporation Rate:** Slower  
(Ethyl Ether = 1)

**Upper Explosion Limit:** Unavailable

**Lower Explosion Limit:** Unavailable

**Vapor Pressure:** Unavailable

**Vapor Density:** Heavier

**Relative Density:** ~1.06 @ 68° F (20° C)

**Weight per Gallon:** ~8.84

**Solubility in Water:** ~2%

**Volatile %:** >95%

**VOC %:** Unavailable

**Autoignition Temperature:** Unavailable

**Decomposition Temperature:** Unavailable

**SECTION 10 - STABILITY AND REACTIVITY****REACTIVITY:**

Reacts violently with strong oxidizers

**STABILITY:**

Stable under normal conditions of 70° F (21° C) and 14.7 psig (760 mm Hg).

**POSSIBILITY OF HAZARDOUS REACTIONS:**

Avoid contact with strong oxidizers

**CONDITIONS TO AVOID:**

None anticipated under normal conditions of use

Section 10 continued on next page

**SECTION 10 - STABILITY AND REACTIVITY (continued)****INCOMPATIBLE MATERIALS:**

Avoid contact with strong oxidizers

**HAZARDOUS DECOMPOSITION PRODUCTS:**

Not anticipated under normal conditions of use.

**DECOMPOSITION:**

Unknown

**SECTION 11 - TOXICOLOGICAL INFORMATION****LIKELY ROUTES OF EXPOSURE:**

Skin and eye contact and inhalation

**SYMPTOMS:****Eyes:** Symptoms include pain and redness.**Skin:** Redness**Breathing:** Symptoms include irritation of respiratory tract.**Swallowing:** Nausea**EFFECTS FROM EXPOSURE:****Immediate:** Causes serious irritation to the eyes. May cause skin irritation. Harmful if swallowed.**Delayed:** None known**Chronic:** None known**TOXICITY DATA:**Acute oral LD<sub>50</sub> (rat) – >2000 mg/kg (for majority component)Dermal LD<sub>50</sub> (rat) – greater than 2000 mg/kg (for majority component)**CARCINOGENICITY**

This product is not reported to have any carcinogenic effects. This product (or components) is not listed in IARC Monographs, the current NTP Report on Carcinogens or the current ACGIH TLVs as a carcinogen or potential carcinogen. OSHA does not regulate it as a carcinogen.

**SECTION 12 - ECOLOGICAL INFORMATION****ECOTOXICITY:**

No data available

**PERSISTENCE AND BIODEGRADABILITY**

No data available for product

**BIOACCUMULATIVE POTENTIAL:**

No data available

**MOBILITY IN SOIL:**

No data available

**OTHER ADVERSE EFFECTS:**

No data available

**SECTION 13 - DISPOSAL CONSIDERATIONS**

Incineration is the recommended disposal method for all chemical wastes. Material collected on absorbent material may be deposited in a landfill in accordance with all applicable local, state and federal regulations.

This product, if disposed of, is not considered a hazardous waste under current RCRA definitions.

**SECTION 14 - TRANSPORT INFORMATION**

Not regulated under current U.S DOT, TDG (Canadian), ICAO (air) or IMO (water) transport regulations.

**SECTION 15 - REGULATORY INFORMATION****TSCA INFORMATION:**

All components in this product are in compliance with TSCA Inventory requirements.

**SARA:**

CERCLA/SARA 302: None

CERCLA/SARA 311/312: Acute

CERCLA/SARA 313: None



PPH, stripped


Preparation date: October 15, 2013  
Page 7 of 7

**SECTION 16 - OTHER INFORMATION**

PREPARATION DATE: October 15, 2013  
SUPERCEDES: Not applicable  
REASON FOR REVISION: New SDS

The product information contained herein is believed to be accurate as of the date of the Safety Data Sheet, and is provided without warranty, expressed or implied, as to the results of use of this information or the product to which it relates. Recipient assumes all responsibility for the use of this information and the use (alone or in combination with any other product), storage or disposal of the product, including any resultant personal injury or property damage.

\*\*\*END OF REPORT\*\*\*


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# Charleston **Daily Mail**

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Wednesday January 22, 2014

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## Freedom Industries claims all leaked substances now disclosed

by Dave Boucher  
Daily Mail Capitol Bureau Chief

CHARLESTON, WV -- After being ordered by state regulators to disclose any additional substances leaked from a storage tank and into the Elk River water supply, Freedom Industries said only two chemicals were in the tank at the time of the spill.

"Our records and internal investigations indicate that there were no other materials released," Freedom Industries President Gary Southern wrote in a letter to the state Department of Environmental Protection.

About 9:50 a.m. Tuesday, Southern pulled DEP official Mike Dorsey into an office that was involved in the leak, Dorsey said Wednesday.

Huffman said Southern believed the company had stopped using the new chemical. Freedom told the DEP Tuesday about 300 gallons of the new chemical, known as "leaky" container with the crude MCHM.

Freedom's revelation 12 days after the leak spurred an order for more information from the DEP. "Having to order them to provide such obvious information is indicative of the contempt," DEP Secretary Randy Huffman said in a press release Wednesday morning.



At a press conference Wednesday before Southern's letter was released, Huffman d what chemicals were stored in the tank until Tuesday.

"On the day of the spill, we believed that we were sure. We believed that we had MC 'What's in the tank?' that's the answer we got," Huffman said.

"The question that we asked should have revealed this as well."

Gov. Earl Ray Tomblin said it was "very disappointing" to learn about the existence comment in a press briefing after a presentation where he declared January "Learn Southern's letter is the only source mentioned in a press release announcing Freedom and PPH, stripped were the only chemicals leaked.

DEP spokesman Tom Aluisse said the department's order asking for information wa "That's the extent of what we can do. We're going to go forward from here with the on everything," Aluisse said Wednesday evening.

The letter describes the amounts of the new chemical in the tank at the time Freedom Southern writes "after extensive calculations" the company believes crude MCHM i tank, with PPH comprising 7.3 percent. The rest, 4.2 percent, was water, according It says PPH is added to crude MCHM "as an 'extender,' in that the crude MCHM is quantities."

Southern calls the material a "hydrophobic glycol ether." A document produced by components of the "PPH, stripped," says glycol ethers are used for cleaning purposes process of cleaning materials from coal.

Southern's letter doesn't use the term "stripped" in describing the chemical. Dorsey byproduct of other chemicals. The exact components of the chemical aren't clear from The sheet, provided to the DEP by Freedom, calls the components "polyglycol ether chemical identity because it's a "trade secret," according to the sheet.

The sheet does say it's a clear, colorless or yellow liquid at 68 degrees Fahrenheit and It can cause eye or skin irritation if someone comes into contact with it, and it can c according to the sheet.

Health officials were still learning about the chemical late Tuesday.

Although a DEP press release didn't specifically say Freedom broke the law, it said chemicals involved in the spill violates state code.

Contact writer Dave Boucher at 304-348-4843 or david.boucher

@dailymailwv.com. Follow him at [www.Twitter.com/Dave\\_Boucher1](http://www.Twitter.com/Dave_Boucher1). ;

## Coe, Mary

---

**From:** Ajl, Diane  
**Sent:** Monday, January 13, 2014 8:06 AM  
**To:** Coe, Mary; Briggs-Steuteville, Sheila  
**Cc:** Gray, Heather; Parent, Suzanne; Isales, Lydia  
**Subject:** Fw: who @ EPA is handling the elk river spill?

Folks - fyi - per the messages below, RCRA questions have been raised and have been forwarded to John Armstead. Stay tuned. Thx. Diane

---

**From:** Mulkey, Marcia  
**Sent:** Sunday, January 12, 2014 9:10:35 PM  
**To:** Ajl, Diane; Gray, Heather; Field, Stephen  
**Subject:** Fw: who @ EPA is handling the elk river spill?

---

**From:** Garvin, Shawn  
**Sent:** Sunday, January 12, 2014 9:03:30 PM  
**To:** Hodgkiss, Kathy; Early, William; Melvin, Karen; Wright, Dave; Mulkey, Marcia; Isales, Lydia; Armstead, John A.  
**Cc:** duteau, helen; White, Terri-A; D'Andrea, Michael; Ryan, Daniel  
**Subject:** Re: who @ EPA is handling the elk river spill?

Kathy - Thx. We recognized that the questions were more than what we could turn around in an hour. HQ told the reporter we would get back to them tomorrow. However, all of these questions go to the heart of what we have been discussing this weekend and need to piece together tomorrow.

Thanks - Shawn

---

**From:** Hodgkiss, Kathy  
**Sent:** Sunday, January 12, 2014 8:44:00 PM  
**To:** Garvin, Shawn; Early, William; Melvin, Karen; Wright, Dave; Mulkey, Marcia; Isales, Lydia; Armstead, John A.  
**Cc:** duteau, helen; White, Terri-A; D'Andrea, Michael; Ryan, Daniel  
**Subject:** Re: who @ EPA is handling the elk river spill?

Sorry, Shawn -- I've been playing tennis since 5:10pm or so. Just picking this up now. Missed 6:30 deadline -- we can follow up tomorrow if info is still needed. I think the questions may be RCRA storage related so I will forward to John A. Kathy

---

**From:** Garvin, Shawn  
**Sent:** Sunday, January 12, 2014 6:24:47 PM  
**To:** Early, William; Hodgkiss, Kathy; Melvin, Karen; Wright, Dave; Mulkey, Marcia; Isales, Lydia  
**Cc:** duteau, helen; White, Terri-A; D'Andrea, Michael; Ryan, Daniel  
**Subject:** Re: who @ EPA is handling the elk river spill?

Do we have anything I can pass along to Alisha? Thx

---

**From:** Garvin, Shawn  
**Sent:** Sunday, January 12, 2014 5:58:43 PM  
**To:** Early, William; Hodgkiss, Kathy; Melvin, Karen; Wright, Dave; Mulkey, Marcia; Isales, Lydia

**Cc:** duteau, helen; White, Terri-A; D'Andrea, Michael; Ryan, Daniel  
**Subject:** Re: who @ EPA is handling the elk river spill?

Understood. Let's answer what we can, and part of our answer can be that we need more info.

---

**From:** Early, William  
**Sent:** Sunday, January 12, 2014 5:55:13 PM  
**To:** Garvin, Shawn; Hodgkiss, Kathy; Melvin, Karen; Wright, Dave; Mulkey, Marcia; Isales, Lydia  
**Cc:** duteau, helen; White, Terri-A; D'Andrea, Michael; Ryan, Daniel  
**Subject:** Re: who @ EPA is handling the elk river spill?

Will try, but not sure we have enough info about the facility and state and fed regs to respond in the time we have,

---

**From:** Garvin, Shawn  
**Sent:** Sunday, January 12, 2014 5:27:35 PM  
**To:** Hodgkiss, Kathy; Early, William; Melvin, Karen; Wright, Dave; Mulkey, Marcia; Isales, Lydia  
**Cc:** duteau, helen; White, Terri-A; D'Andrea, Michael; Ryan, Daniel  
**Subject:** Fw: who @ EPA is handling the elk river spill?

Bill, Kathy, Lydia, et al. - Can you take a quick look at the NY Times questions below and see if we can find some quick insight for me to get back to HQ.

Thanks - Shawn

---

**From:** Johnson, Alisha  
**Sent:** Sunday, January 12, 2014 5:21:28 PM  
**To:** Stanislaus, Mathy; Garvin, Shawn  
**Cc:** Hull, George; Davis, Alison  
**Subject:** Fw: who @ EPA is handling the elk river spill?

Shawn and Mathy,  
Our NY Times reporter is filing a story tonight on WV's regs. Her questions are in the email chain below. I think we can probably address her first question, but I'm not sure we have enough context for the second. Unfortunately, she is filing at 6:30 p.m. Is there anything that we can give her?  
Let me know if there are others that should be on this chain.

---

**From:** Davenport, Coral <Ex. 6 - Personal Privacy @nytimes.com>  
**Sent:** Sunday, January 12, 2014 5:04:14 PM  
**To:** Johnson, Alisha  
**Subject:** Re: who @ EPA is handling the elk river spill?

I'm trying to write about the context that WVA has had a troubled history on complying with enviro regs., and often has looser regs than other states.

More specifically, I'm trying to track down two in-the-weeds but key details. I'm noting that the facility where the chemical was stored was not subject to EPA inspection because it was exempt for being a \*storage\*, rather than \*production\* facility. I'm trying to find out if that is a state, rather than fed. rule, and if so, do other states have different rules?

Also I'm told that under federal law, the facility should have had a berm, but it did not. So is that a violation?

I know this is in the weeds, but if someone who's familiar with this context and these particular regs could help, I'd be incredibly grateful. I need to file by 6:30 at the absolute latest.

On Sun, Jan 12, 2014 at 4:46 PM, Johnson, Alisha <[Johnson.Alisha@epa.gov](mailto:Johnson.Alisha@epa.gov)> wrote:  
Hey there,  
Happy to help. What are you looking into specifically?

---

**From:** Ex. 6 - Personal Privacy <[REDACTED]@nytimes.com>

**Sent:** Sunday, January 12, 2014 4:05:46 PM

**To:** Johnson, Alisha; Reynolds, Thomas

**Subject:** who @ EPA is handling the elk river spill?

Am parachuting in...

--  
Ex. 6 - Personal Privacy

Energy and Environment Correspondent  
The New York Times  
Washington Bureau  
1627 I St. NW, Suite 700  
Washington, DC 20006

Ex. 6 - Personal Privacy

--  
Ex. 6 - Personal Privacy

Energy and Environment Correspondent  
The New York Times  
Washington Bureau  
1627 I St. NW, Suite 700  
Washington, DC 20006

Ex. 6 - Personal Privacy



Coe  
1/13/14

west virginia department of environmental protection

Division of Air Quality  
601 57<sup>th</sup> Street SE  
Charleston, WV 25304  
Phone: 304 926 0475 • FAX: 304 926 0479

Earl Ray Tomblin, Governor  
Randy C. Huffman, Cabinet Secretary  
www.dep.wv.gov

January 10, 2014

CERTIFIED MAIL

Article # 91 7108 2133 3938 4325 3058

Freedom Industries, Inc.  
Mr. Gary Southern, President  
P.O. Box 713  
Charleston, WV 25328

RE: NOTICE OF VIOLATION(S)  
Freedom Industries, Inc.  
WV ID# 039-00035

Dear Mr. Southern:

On January 9, 2014, an odor investigation was conducted in public areas along the I-77 corridor, north of Bigley Ave. to south of the I-77/I-79 split, by personnel of the Division of Air Quality (DAQ). The investigation was prompted by citizen complaints of objectionable odors in those areas, which are near and downriver of the Freedom Industries, Inc. The investigation established that Freedom Industries, Inc. facility located in Charleston, WV is in violation of the West Virginia Code §§ 22-5-3 for causing statutory air pollution by discharging into the air MCHM. Also, Freedom Industries, Inc. is in violation of 45 CSR 4, in particular, Section 3.1, which states "No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public." Specifically, objectionable odors were determined to be in public areas at intersections including Bigley Ave. & Westmoreland Dr. and Bigley Ave. & Pennsylvania Ave. Following the aforementioned odor patrol, DAQ personnel discovered that the source of these odors were from a continuously leaking Crude MCHM Tank (No. 396) at the Freedom Industries, Inc. facility. Upon arrival at Freedom Industries, Inc. facility at 11:10 am, 01/09/2014, DAQ personnel discovered that no spill containment measures had been initiated and that an accumulating MCHM leak pool was seeping thru a dike wall adjacent to the Elk River and a downriver oil sheen was observed.

You should be aware that for each violation your Company may be subject to civil and/or criminal penalties and further action or remedies as provided by West Virginia Code §§ 22-5-6, which may include imposition of a civil penalty of up to ten thousand (\$10,000) dollars per day for each violation.

Promoting a healthy environment.

Ex. 5 - Deliberative

A written response to this Notice of Violation is required from your Company within 30 days after receipt. The following information must be in your response to the Notice of Violation:

(1) A detailed explanation of the cause(s) of the condition(s) leading to the cited violation or a description of the action(s) being taken or to be taken to ascertain the cause(s) for noncompliance.

(2) A statement of how long the condition(s) has existed.

(3) A detailed explanation of the remedial measures that have been taken and will be taken to address the causes of noncompliance. For any remedial measure(s) not yet taken, provide expected date(s) for completion. If all remedial measures have been completed, provide the date that the Company believes that compliance with air quality requirements was achieved.

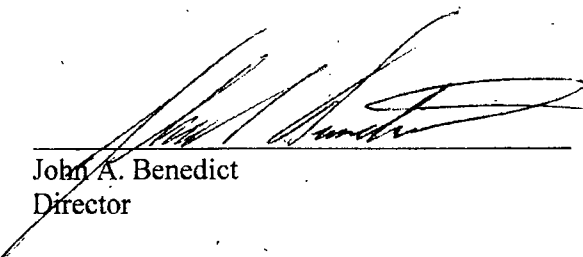
Please be aware that any person who knowingly misrepresents any material fact in an application, record, report, plan, or other document filed or required to be maintained under the provisions of West Virginia Code 22-5-1, et seq., or any rules promulgated thereunder, is guilty of a misdemeanor and, upon conviction, shall be fined not more than twenty-five thousand (\$25,000) dollars or imprisoned in the county jail not more than six months or both fined and imprisoned.

Ex. 5 - Deliberative

Furthermore, any person who knowingly violates any provision of West Virginia Code 22-5-1, et seq., any permit or any rule or order issued pursuant to that article is guilty of a misdemeanor and, upon conviction, shall be fined not more than twenty-five thousand (\$25,000.00) dollars for each day of such violation or imprisoned in the county jail not more than one year or both fined and imprisoned.

Further, please note that for purpose of the foregoing, violations on separate days are separate offenses.

The Division looks forward to your timely written response to this Notice of Violation.

  
John A. Benedict  
Director

cc:

Mr. Dave McCombie  
Chemstream  
166 Commerce Drive  
Stoystown, Pa, 15563

Andrew G. Fusco  
2400 Cranberry Square  
2<sup>nd</sup> Floor  
Morgantown, WV 26508-9209



west virginia department of environmental protection

Division of Water and Waste Management  
601 57<sup>th</sup> Street SE  
Charleston, WV 25304  
Phone: (304) 926-0495  
Fax: (304) 926-0463

Earl Ray Tomblin, Governor  
Randy C. Huffman, Cabinet Secretary  
www.dep.wv.gov

**ORDER  
ISSUED UNDER THE  
WATER POLLUTION CONTROL ACT  
WEST VIRGINIA CODE, CHAPTER 22, ARTICLE 11  
AND THE  
GROUNDWATER PROTECTION ACT,  
WEST VIRGINIA CODE, CHAPTER 22, ARTICLE 12**

Water order

TO: Etowah River Terminal, LLC.  
Attn: John Hutchinson, Terminal Manager  
P.O. Box 713  
Charleston, WV 25323

DATE: January 10, 2014

ORDER NO.: 8027

**INTRODUCTION**

The following findings are made and Order issued to Etowah River Terminal, LLC pursuant to the authority vested in the Director of the Division of Water and Waste Management under Chapter 22, Article 11, Section 1 et seq. and Chapter 22, Article 12, Section 1 et seq. of the Code of West Virginia.

**FINDINGS OF FACT**

In support of this Order, the Director hereby finds the following:

1. Etowah River Terminal, LLC operates a bulk storage distribution center located near Charleston, Kanawha County, West Virginia. Etowah River Terminal, LLC was reissued permit coverage under WV/NPDES General Water Pollution Control Permit No. WV0111457, Registration No. WVG610920 on November 17, 2009.
2. On January 9, 2014, West Virginia Department of Environmental Protection (WVDEP) personnel received a complaint concerning an odor at / near Etowah River Terminal, LLC. After investigation, the following was observed and documented:
  - a. Free product was observed in secondary containment units surrounding above ground storage tanks containing a chemical described as 4-Methylcyclohexene Methanol. It

Promoting a healthy environment.

chem

was also observed that this material had escaped the secondary containment unit and had entered the Elk River. Failure to maintain adequate secondary containment for above ground storage tanks is a violation of 47 CSR 58, Section 4.8.a.

It was determined that the intake for the local public water supply is located approximately 1.5 miles downstream of the discharge, and has been impacted.

The release of this spilled material has caused conditions not allowable in the Elk River by creating odors in the vicinity of state waters, by requiring an unreasonable degree of treatment for the production of potable water, and by creating a sheen on the surface of the water, a violation of 47 CSR 2, Section 3.

Ettowah River Terminal, LLC has failed to take any and all measures necessary to contain the spill and render it harmless, a violation of 47 CSR 11, Section 2.5.

Ex. 5 - Deliberative

3. At 12:05 p.m. on January 9, 2014, Bob Reynolds with Freedom Industries reported the spill to the Emergency Response Spill Hotline. Mr. Reynolds indicated that the facility discovered a hole in the tank; as well as, the secondary containment unit was containing the spilled material.

### ORDER FOR COMPLIANCE

And now, this day of January 10, 2014, Ettowah River Terminal is hereby ORDERED by the Director as follows:

1. Ettowah River Terminal, LLC. shall immediately take measures to initiate compliance with all terms and conditions of its permit and pertinent laws and rules.
2. Ettowah River Terminal, LLC. shall immediately **Cease and Desist** any further receipt of material to be stored within the area of the faulty secondary containment.
3. Ettowah River Terminal, LLC shall immediately take all necessary measures to contain, recover and remediate the material that has escaped the breached above ground storage tank and the secondary containment structure; which shall at a minimum include the installation of interceptor trenches adjacent to the Elk River, and the installation and maintenance of booms and absorbents in affected waterways.
4. Ettowah River Terminal, LLC. shall immediately conduct an integrity test of all above ground storage tanks and secondary containment structures for the entire facility.
5. Prior to resuming receipt of material to be stored, Ettowah River Terminal, LLC. must provide a report for approval which documents that the integrity of all storage and containment structures are sound.

### OTHER PROVISIONS

1. Compliance with the terms and conditions of this Order shall not in any way be construed as relieving Ettowah River Terminal, LLC of the obligation to comply with any



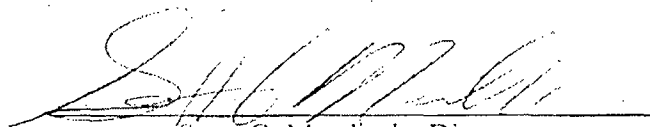
applicable law, permit, other order, or any other requirement otherwise applicable. Violations of the terms and conditions of this Order may subject Ettowah River Terminal, LLC to additional enforcement action in accordance with the applicable law.

2. The provisions of this Order are severable and should a court or board of competent jurisdiction declare any provisions to be invalid or unenforceable, all other provisions shall remain in full force and effect.
3. This Order is binding on Ettowah River Terminal, LLC, its successors and assigns.
4. This Order shall terminate upon Ettowah River Terminal, LLC's notification of full compliance with the "Order for Compliance" and verification of this notification by WVDEP.

### **RIGHT OF APPEAL**

Notice is hereby given of your right to appeal the terms and conditions of this Order which you are aggrieved to the Environmental Quality Board by filing a NOTICE of APPEAL on the form prescribed by such Board, in accordance with the provisions of Chapter 22, Article 11, Section 21 and/or Chapter 22, Article 12, Section 11 of the Code of West Virginia within thirty (30) days after receipt of this Order.

This Order shall become effective upon receipt.



Scott G. Mandirola, Director  
Division of Water and Waste Management

*revised March 2013*

h River Terminal LLC

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## Ex. 5 - Deliberative

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SPILL

# Ex. 5 - Attorney-Client

# **Ex. 5 - Attorney-Client**

# **Ex. 5 - Attorney-Client**

# **Ex. 5 - Attorney-Client**

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